USSR Letter

Infant mortality in the Soviet Union

MICHAEL RYAN

For the past 12 years it has been impossible to provide an answer to the question: what is the level of infant mortality in the Soviet Union? The authorities' failure to publish this key social indicator, however, did not seem inexplicable when the latest available data were examined—they showed that the trend was moving in the wrong direction. The rate had risen sharply from 22·9 deaths of infants under the age of 1 year per 1000 live births in 1971 to 27·9 per 1000 in 1974.

So when the Central Statistical Administration discontinued the time series it provoked only speculation that the unpublished data would show a further deterioration, thus reflecting poorly on the quality of social, economic, and environmental conditions for which the Soviet state had assumed direct responsibility. A reliable figure for 1976, which eventually appeared in a small circulation specialist publication, confirmed that the rate had indeed jumped—to 30·8 per 1000.[1] Interestingly enough, it was higher, though not by much, than the estimate for that year made by Davis and Feshbach in a study that constituted an exhaustively researched model of demographic detective work.[2]

New data

It is undoubtedly a sign of the new times (to use a Russian phrase) that the publication of infant mortality data has recently restarted. Admittedly, the series starts again in 1980 at a lower point and the year in which the rate peaked still cannot be established since the latter 1970s remain blank spaces. Even if the authorities deliberately withheld the highest figures, however, they must be given credit for having now released a more detailed breakdown than was normal in the past. Table I shows the figures for the entire USSR supplemented with a breakdown by urban and rural areas respectively.

The differential between the two is consistent, substantial, and very much to the disadvantage of the rural population. Thus in 1985 the urban rate was 21·7 as against 32·0 per 1000 live births in the rural hinterland. The importance of this gap can be appreciated when it is known that, for the relevant year, almost 35% of the total population was officially classed as rural. Incidentally, that percentage is exceeded, or far exceeded, in several of the 15 republics which together constitute the USSR.[3]

In addition to the rates given in table I it is possible to find absolute figures that are broken down by month and by urban and rural areas (table II).

I should draw attention to a specifically Soviet recording practice which, judged from an international standpoint, entails some underrecording of infant deaths. This difference in definition was documented by Davis and Feshbach and a recent Soviet authority has confirmed its continued employment. The text in question stipulates: "If a foetus is born alive but has a body weight of less than 1000 grammes, or is born before 28 weeks of gestation, it is only counted as a live birth if it lives for a week (168 hours) from the moment of birth."[4] Thus the Soviet definition of a live birth excludes numbers of infants who are born with vital signs.

TABLE I—*Number of children dying before the age of 1 year per 1000 live births*

Year	USSR	Urban areas	Rural areas
1970	24·7	23·3	26·2
1980	27·3	23·5	32·5
1981	26·9	22·8	32·7
1982	25·7	22·2	30·7
1983	25·3	21·7	30·6
1984	25·9	21·9	31·8
1985	26·0	21·7	32·0
1986	25·1	NA	NA

NA=Not available.
Source: *Argumenty i fakty* 1987 Maya 16-22:8.

TABLE II—*Number of children dying before the age of 1 year in 1985*

Month	USSR No (000s)	Urban areas No (000s)	Rural areas No (000s)
January	13·5	6·8	6·7
February	12·7	6·1	6·6
March	12·1	6·1	6·0
April	11·0	5·7	5·3
May	11·0	5·8	5·2
June	11·0	5·6	5·4
July	12·3	5·8	6·5
August	12·2	5·7	6·5
September	11·7	5·6	6·1
October	10·8	5·4	5·4
November	10·2	5·1	5·1
December	11·3	5·5	5·8
Total	139·8	69·2	70·6

Source: *Zdravookhranenie Rossiskoi Federatsii* 1987;8:41.

Behind the figures

If the policy of glasnost underlies the publication of infant mortality statistics which show some slight deterioration over the years 1983-5 it also shows the general public what many specialists would have known—namely, that the rate is actually higher in the Soviet Union than in "developed capitalist countries." That was one point made in an article published by *Nedelya*, the weekly supplement of *Izvestiya*, which is aimed mainly at women readers.[5]

Some evidence of the degree of priority now attached to reducing infant deaths was signalled by the editorial judgment that "the most decisive and most urgent measures are required to understand the causes and rectify the situation." The article went on to report a meeting of the collegium of the Russian republic's health ministry, which had been convened to probe the reasons underlying the "serious deficiencies in work to protect the health of young children and reduce infant mortality."

The first indirect cause identifiable within the health care system was the inadequate "material base." At certain of the infant mortality black spots in the republic appropriate and adequate

Centre of Russian and East European Studies, University College of Swansea, Swansea SA2 8PP
MICHAEL RYAN, PHD, lecturer in politics and Russian studies

accommodation was not available because of lengthy delays in construction or planning oversights. In Smolensk the building for a small maternity home had remained unfinished for decades, only slow progress had been made with the premature baby unit in Tomsk, while in Tuva no provision had been made for new paediatric units.

The Republican Minister of Health, A I Potapov, implied that a higher priority had already been assigned to the construction of maternity homes and children's hospitals when he stated that they would account for over 30% of new capital spending in the health service during the current five year planning period (1986-90). He did not go on to add, however, the highly relevant qualification that underspending of capital allocations was the rule rather than the exception and that among health care administrators the associated problem of lack of effective control over start and completion dates had been a perennial source of complaint.

Shortages of equipment constitute another factor for which, in theory, the health service can be held partly responsible. These were said to be the most serious in respect of reanimation and monitoring systems and it emerged that in Rostov they were unavailable even at the research institute for midwifery and paediatrics. At this point reference was made to a systemic cause of shortages in the USSR—the failure to ensure that supplies arrived at their destination. Thus five sets of the equipment in question had been despatched to the Rostov region but could not now be accounted for. ("Where are they?" asked *Nedelya*.)

Turning from capital to human resources, which he identified as the "question of questions," the minister pinpointed vast disparities between the number of the key personnel actually available and the norms determined by planners. In semimountainous Chechen-Ingushiya, for example, one gynaecologist on average cared for 700 pregnant women although the maximum caseload had been set at 150. In rural districts the paediatricians were responsible for three to four times more children than the regulations specified. Potapov also admitted that the professional competence of doctors was such that errors of diagnosis frequently occurred. In an indictment that seems fairly comprehensive in coverage he lamented that recently qualified staff lacked practical experience while those who obtained their diploma 10-15 years ago were unaware of the latest developments in their discipline.

A related point concerns the deep rooted bureaucratic departmentalism of Soviet institutions. In this case it is manifested in the absence of cooperation and collaboration between the health service administration at regional level and their local medical institutes—for example, in Saratov, Kalinin, and Smolensk. There is also a failure of liaison between four different types of unit that provide care for mothers and children: the policlinics for adults, women's consultation clinics, maternity homes, and children's policlinics. "It is not a matter of chance," said the minister, "that 25% of mothers whose children died in the first year of life had chronic illnesses."

At high risk

Nedelya also reported the medical demographer, M S Bednyi, on the association between infant mortality and the number of babies born prematurely at 7 or 8 months' gestation. At present, he said, these infants represented "over ten per cent" of all live births. And of the various preventable influences that help to explain that statistic Bednyi put abortion first and foremost. This is backed up in a separate article also published in *Nedelya*, which contained the information that in the Russian republic in 1985 there were 123·2 abortions per 1000 women of reproductive age (a rate 25 times higher than that of Federal Germany) and that only 15-18% of women in the republic had *not* had at least one abortion during their lifetime.[6]

Bednyi also referred to the higher than average risk of mortality among babies born out of wedlock, the number of which he gave as about 500 000. (The figure probably refers to the Soviet Union as a whole; if so, approximately 10% of live births in the USSR are registered as illegitimate.) As for smoking he noted that its harmful effects would be experienced by 40% of women under the age of 30, while alcoholism among women "unfortunately has ceased to be exceptional." He also mentioned the adverse consequences of geographical mobility, such as a young mother's separation from helpful relatives and friends, and the frequent failure of industrial and other enterprises to observe the regulations which had been laid down in order to protect the health of pregnant women at their place of employment.

In Central Asia

To restate a familiar caution, average figures for the Soviet Union may well conceal substantial regional variations which reflect differences in the level and quality of services. Although contemporary infant mortality data for the Baltic republics seem difficult to obtain, there can be little doubt that the chances of a baby's survival would be far better in Latvia, Lithuania, and Estonia than in Central Asia. The following is a quotation from a recent account which *Pravda* gave of the position in Uzbekistan, the most populous of the Central Asian republics.[7]

There, even high reported rates should be regarded as suspect, since infant deaths at certain health service units had been deliberately concealed. That happened in a maternity ward of the central city hospital at Sovetbad where eight newly born babies died from an outbreak of toxaemia and septicaemia within the period of a few days. Moreover, following investigations by the local party committee in one rural district the result of putting the record right was that the infant mortality ratio quadrupled straightaway. As for specific figures, whether accurate or not, *Pravda* stated that the rate for Surkhandar'insk region was 55 per 1000—and this was exceeded in certain districts—that is, smaller areas.

By citing case histories and describing conditions in specific hospitals *Pravda* also offered some vivid insights into the reasons for the appalling loss of infant life. Thus in one unit women in labour were found alongside gynaecological patients and in another pregnant women with viral hepatitis were in the maternity ward. As for the calibre of staff the article recorded complaints from district centre hospitals—that is, in rural areas—to the effect that "some young doctors are not able to find a vein with a needle and have not gained an understanding of the fundamental elements of treatment." Even those who had attended refresher courses at the Tashkent medical institute lacked "essential practical skills."

The list of shortcomings continues: inadequate attention to the nutritional requirements of infants, unsuitable and overcrowded buildings for maternity cases, a deficit of over 29 000 paediatric beds in the republic as a whole, shortages of medical equipment and medicines. There were not even sufficient bedsteads, hot water bottles, scales for babies, and instruments for measuring their growth. For every eight changes of bed linen required only three or four took place.

Drawing to a close on an optimistic note, the *Pravda* article stated that the current five year planning period should be a turning point: 59% of the republic's spending on health care would be devoted to the development of obstetric and paediatric services. All the same, it had already referred to that great constant factor in Soviet society, the problem of closing the gap which yawns between impressive plans and concrete results. So unless change can be implemented more rapidly and efficiently than in the past, glasnost may have little effect on the high level of infant mortality.

References

1 Burenkov SP, Golovteev VV, Korchagin VP. *Sotsialisticheskoe zdravookhranenie: zadachi, resursy, perspektivy razvitiya*. Moskva: Meditsina, 1979:111.
2 Davis C, Feshbach M. *Rising infant mortality in the USSR in the 1970s*. Washington DC: Bureau of the Census, US Department of Commerce, 1980.
3 Ryan M, Prentice R. *Social trends in the Soviet Union from 1950*. London: Macmillan Press, 1987: 16-21.
4 Sluchanko IS, Tserkovnyi GF. *Statisticheskaya informatsiya v upravlenii uchrezhdeniyami zdravookhreniya*. Izdanie 2-oe, Moskva: Meditsina, 1983:50.
5 Mushkina E. Chelovek rodilsya. *Nedelya* 1987;7:16-7.
6 Remennik L. Zhizn' ubitaya v tebe. *Nedelya* 1987;38:12.
7 Kostikova A, i soavt. Za chastokolom reshenii. *Pravda* 1987 Fevralya 7:3.